Improved Reliability • *Faster Service* • Passenger Amenities

Moving Massachusetts Forward. massDOT

KEY BUS ROUTE IMPROVEMENT PROJECT

ROUTE 39

February 3, 2010
Curley School
493 Centre Street

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AGENDA

- Introduction and Background
- Route 39 Objectives
- Recommendations
- Next Steps
- "Next Bus" Countdown Presentation
- Q & A

Bus Route 39

- Second highest ridership of all MBTA bus routes
  - Over 14,000 riders per day
- Buses run every 6 minutes during rush hour
  - Trip time 30-38 minutes
- One of the MBTA's key bus routes
- 5 mile long route (approx.)

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Project Background

- State Implementation Plan Commitment
- Initial improvement recommendations
  - Public Meeting – February 2008
- Federal stimulus funding
  - Opportunity for implementation
- Key Bus Route Improvement Project

RECOVERY.GOV

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Current Effort

- Citizens Working Group assembled in 2008
- 7 meetings between March and December 2009
- Received federal stimulus funding
- Ongoing coordination
  - Centre/South Street Transportation Action Plan

Stimulus Funding

- American Recovery and Reinvestment Act (ARRA)
- Funds Capital Improvements
- MassDOT focused on Buses
  - $8 million dedicated to Bus Key Routes
- Opportunity to implement now
  - Route 39 is the first of 15 key routes

Objectives

- Improve Bus Service
  - Less bus bunching = Greater reliability
  - Fewer delays = Shorter trip times

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Objectives

- Accessibility
  - Faster boarding
  - Easier bus access for all

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Objectives

- Integration of Transit and Streetscape
  - Passenger comfort & convenience
    - Shelters, benches & bike racks
  - Customer Information
    - Signs & schedules

Challenges to Good Transit

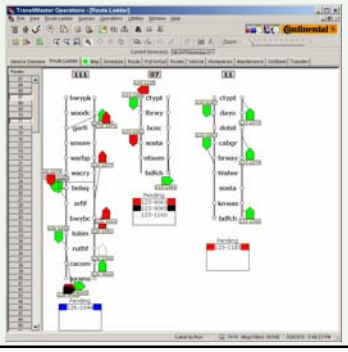
- Access difficult for seniors and persons with disabilities; stops blocked by parked cars
- Many bus stops without shelters and other amenities
- Traffic congestion and double parking
- Traffic signals often not optimized or coordinated
- Placement and n ıus longer trip times

Recommendations

- Service Enhancements
- Improved Accessibility
- Added Passenger Comfort & Convenience
- Clear Customer Information
- Traffic Signal Improvements
- Optimized Bus Stop Locations
- New Downtown Routing

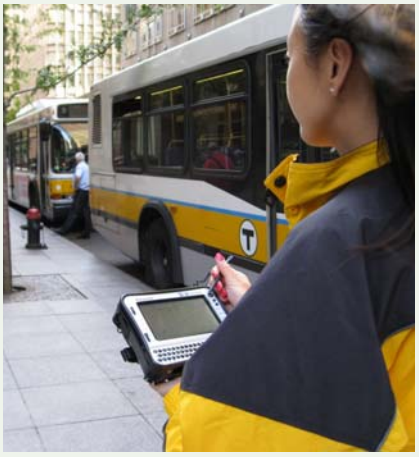
Service Enhancements

- All buses have GPS systems
  - Facilitates better service management
- Centralized bus route supervision
- Development of intervention strategies



Service Enhancements

- Pilot program will equip inspectors on six key bus routes with handheld devices capable of monitoring CAD/AVL route ladders in real-time
- Objective is to improve service reliability by providing valuable, timely information to personnel in a position to take action
- Inspectors will begin using devices in March 2010



Service Enhancements

- Driver Training
  - Four times each day, MBTA Inspectors conduct a corridor check to identify cars illegally parked in bus stops. The Bus Dispatcher passes this information along to the MBTA Transit Police for their action.
  - All bus operators are currently going through a two-day training class on customer courtesy.
  - All buses provided with maps showing route-specific information

Improved Accessibility

- Stops will be clear, visible, and the appropriate size
  - All bus doors must open at curb
  - Prevent cars from parking in stops
  - "Mark" key bus stops
- Required Stop Location Conditions
  - Regular Spacing
  - Appropriate sidewalk width
  - Near crosswalks

Added Passenger Comfort & Convenience

- Install shelters where possible
  - Weather protection, seating, comfort
- New street furniture
  - Shelters, benches, trash barrels, bicycle racks

Clear Customer Information

- Sign upgrades
- Schedules at stops
- Maps on buses
- Neighborhood maps
- Next bus countdown system

Traffic Signal Improvements

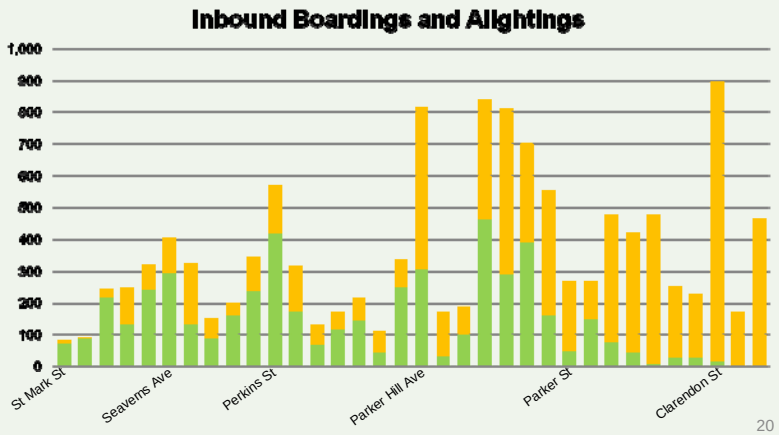
- Signal optimization
  - Timing and phasing changes
  - Benefit buses and general traffic
- Transit signal priority potential
  - CTPS – Huntington Avenue
- Bus stop locations
  - Relocated to improve operations
- Speed up bus service
  - Decrease in bus delay at intersections

Optimized Bus Stop Locations

- Stop spacing
  - National and MBTA Standards 4-7 stops/mile (750 to 1320 ft)
    - More than 20 of the Route 39 bus stops are within 300 - 600 feet of another stop.
- Adequate length for 60’ buses
  - Most stops must be made longer

Optimized Bus Stop Locations

- Boarding count disparity



Optimized Bus Stop Locations

- Accessibility, service, comfort, spacing
- Parking impacts
  - Regain parking at consolidated stops
- Reduced "stop & go" experience for riders
  - Decreased bus delay
- Reduced weaving
  - Enhance bicycle & pedestrian safety

Optimized Bus Stop Locations

- Additional factors considered
  - Regular spacing
  - Ridership
  - Traffic signal improvements
  - Sidewalk width
  - Accessibility
  - Adjacent land use
  - Parking
  - Key shelter locations

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Segment 1: Centre/ South St

- Consolidate to
  - Pond Street
  - St John Street
  - Sedgewick Street
- Ongoing coordination at Monument Square

Current	Proposed
10 Inbound	7 Inbound
10 Outbound	7 Outbound

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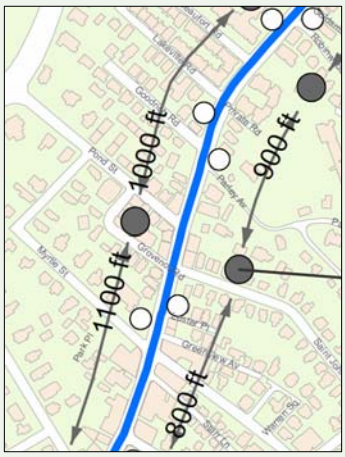
Segment 1: Centre/ South St

- St John Street consolidation
  - Parley Avenue and Lester Place



Existing Parley Avenue (Inbound)

Existing Lester Place (Inbound)

Segment 1: Centre/ South St

- Sidewalk widening at bus stops
  - St John Street
  - Roseway Street
  - Seaverns Avenue

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Segment 1: Centre/ South St

- Shelter opportunities
  - Roseway St
  - 545 Centre St
  - Saint John St
  - Seaverns Ave
  - Sedgewick St

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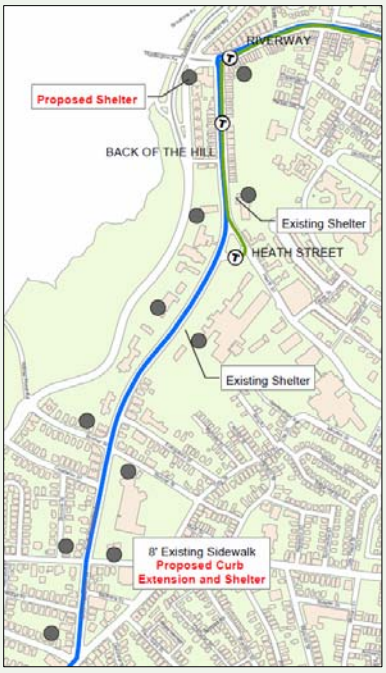
Segment 2: S. Huntington Ave.

- Maintain
  - Back of Hill
  - VA Hospital
  - Bynner Street
- Relocate
  - Perkins Street Inbound to farside

Current	Proposed
7 Inbound	5 Inbound
7 Outbound	5 Outbound



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Segment 2: S. Huntington Ave.

- Perkins Street (Inbound)
  - Relocate to farside

Existing Perkins Street (Inbound)

Proposed Perkins Street (Inbound)

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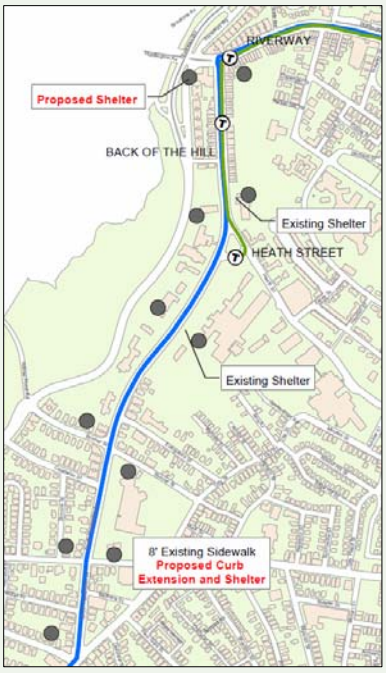
Segment 2: S. Huntington Ave.

- Shelter opportunities
  - Perkins Street (Inbound)
  - Riverway (Outbound)



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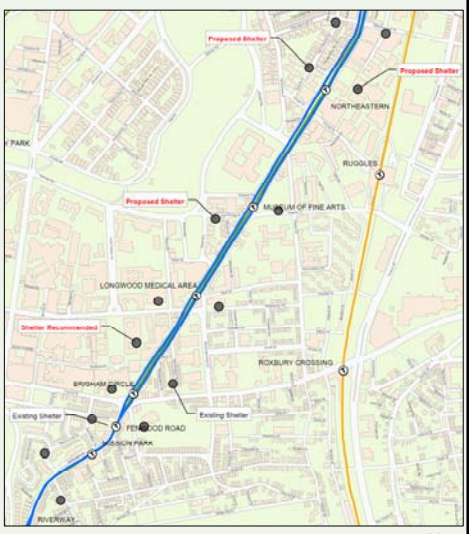
Segment 3: Huntington Ave.

- Relocate to farside
  - Louis Prang
- Ongoing coordination
  - MASCO
  - Mission Hill Health Center

Current	Proposed
10 Inbound	7 Inbound
8 Outbound	8 Outbound



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Segment 3: Huntington Ave.

- Fenwood Rd to Wigglesworth St

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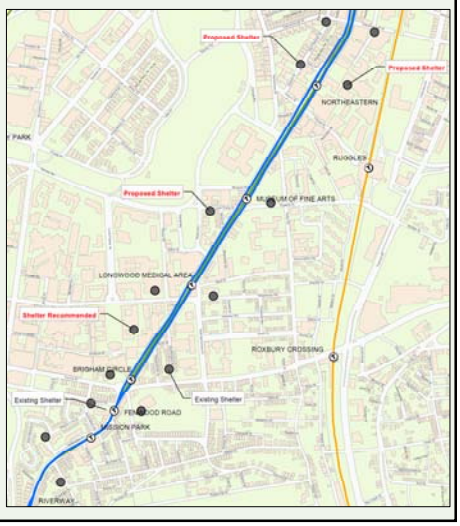
Segment 3: Huntington Ave.

- Shelter opportunities
  - 677 Huntington Ave
  - Louis Prang
  - Opera Place
  - 360 Huntington Ave



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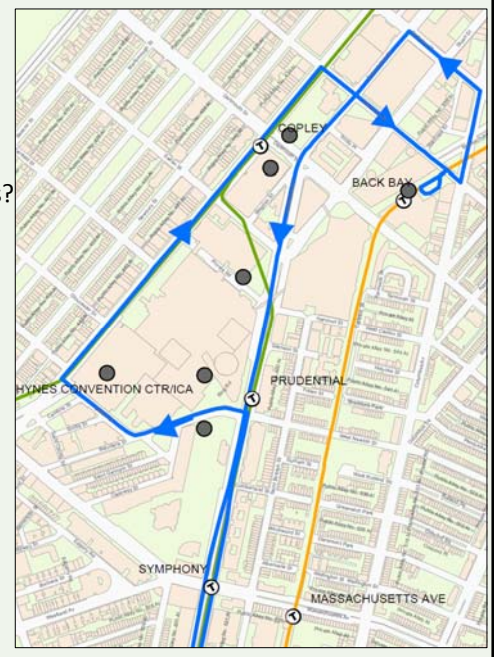
Segment 4: Downtown

- Questions/Issues
  - Most important stops?
  - Priority destinations
    - Copley
    - Back Bay
    - MCCA
  - Routing options



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Downtown Routing

Existing

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Downtown Routing

Alternative 1

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Downtown Routing

Alternative 2

Wrap Up Summary

- Faster and more reliable service
  - Bus stop consolidation
  - Traffic signal optimization
  - Transit signal priority
- Improved accessibility for all
  - Lengthen bus stops
- Added passenger comfort and convenience
  - Installing bus shelters, benches, bike racks and trash barrels
  - Installing bus stop signs and schedules
  - Widening of sidewalks at bus stops

Schedule and Next Steps

- Spring 2010
  - Engineering of bus stop improvements
  - Design plans available to public
  - Back Bay meetings
  - Federal stimulus fund dispersed
  - Ongoing coordination and review with the City
- Summer 2010
  - Construction and implementation

UNLOCKING REAL-TIME

Joshua Robin

Massachusetts Department of Transportation

WHY IS IT SO EASY TO FIND WEATHER AND TRAFFIC REPORTS…

BUT SO HARD TO FIND OUT WHEN THE NEXT 39 BUS WILL COME?

TWO THEORIES

THEORY #1 – NO DEMAND

THEORY #2 – NO SUPPLY

SO, WHAT'S DIFFERENT?

TRAFFIC AND WEATHER INFORMATION ARE "OPEN"

AS A RESULT, DRIVERS HAVE LOTS OF CHOICES

WBZ NEWS RADIO 1030

7

boston.com

FOX 25 WFXT BOSTON

WBZ

NECN

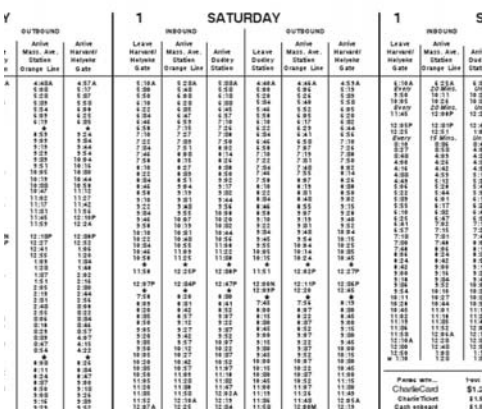
5 abc WCVB BOSTON

TRANSIT INFORMATION WAS "CLOSED"

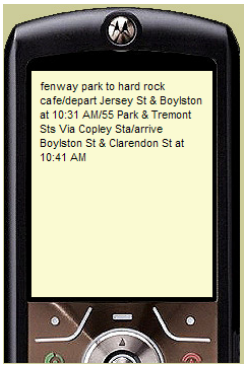
T RIDERS HAD JUST ONE CHOICE FOR MBTA INFORMATION: THE T

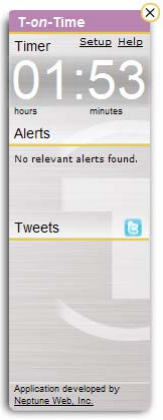
SO, WE DECIDED TO MAKE MBTA INFORMATION OPEN

IN SEPTEMBER 2009, THE MBTA MADE BASIC TRIP PLANNING DATA OPEN



BY NOVEMBER, THERE WERE 6 INNOVATIVE APPLICATIONS BUILT WITH MBTA DATA


fenway park to hard rock cafe/depart Jersey St & Boylston at 10:31 AM/55 Park & Tremont Sts Via Copley Sta/arrive Boylston St & Clarendon St at 10:41 AM



GREAT, BUT WHEN IS THE NEXT BUS ACTUALLY GOING TO SHOW UP? I WANT REAL-TIME INFORMATION!

TRADITIONAL MODEL

First, (1) Countdown Signs

Then, (2) Web and Phone Distribution

Then, Maybe, (3) Share with Others

WHAT IF WE RE-THOUGHT THIS?

COULD WE MAKE BUS LOCATION INFORMATION

AS EASY FOR OUR RIDERS TO FIND AS THE CURRENT TEMPERATURE?

IMPOSSIBLE, RIGHT?

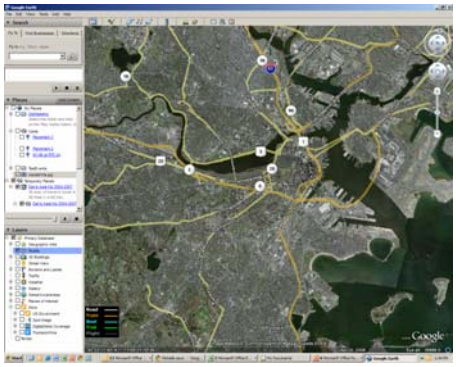
ON NOVEMBER 14th, AS PART OF A TRIAL PROGRAM, THE MBTA RELEASED A REAL-TIME DATA FEED FOR 39 BUS AND FOUR OTHER MBTA BUS LINES.

WITHIN ONE HOUR…

WITHIN ONE HOUR…

A developer integrated the trial data into Google Earth to show the real-time locations of the buses:

Google



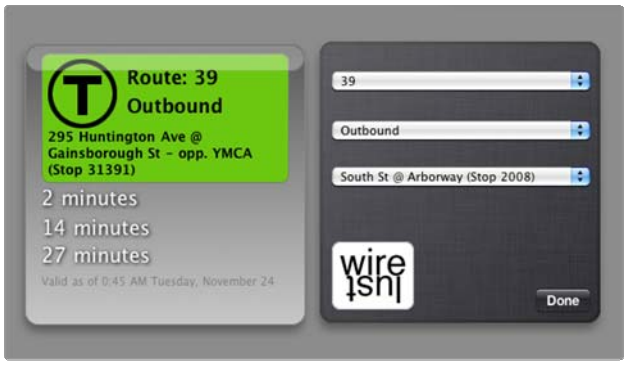
WITHIN TWO DAYS…

A developer integrated the trial data into a free, easily-accessible web page, where T riders can track the buses from any internet-accessible computer:

http://mbta-bus.appspot.com

WITHIN ONE WEEK…

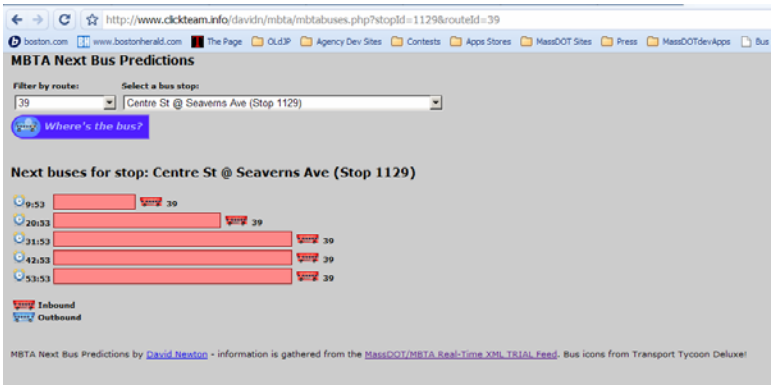
A developer built a desktop application that displays the countdown information for the rider's favorite stop:



http://www.wirelust.com

WITHIN TWO WEEKS…

A developer built a simple web application that displays the bus countdown information without the need for a map:



http://www.clickteam.info/davidn/mbta/mbtabuses.php

WITHIN ONE MONTH…

A developer built an LED sign that shows real-time bus countdown information on Centre Street in Jamaica Plain:

WITHIN FIVE WEEKS…

A developer built iPhone and Android apps that integrate the real-time trial data. The apps cost just 99 cents:

WITHIN SEVEN WEEKS…

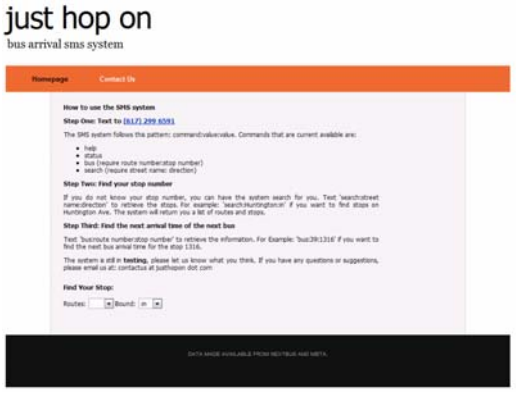
A developer built a system that delivers the real-time data to <u>any</u> phone, mobile or landline:

*

*Try if for yourself by dialing 617-213-0911
Use stop code (0330) or (0085)

WITHIN EIGHT WEEKS…

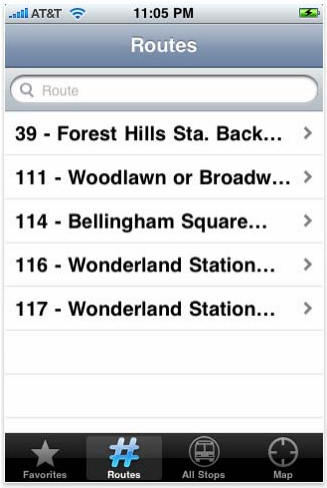
A developer built a system that delivers the real-time data by text message to any mobile phone:

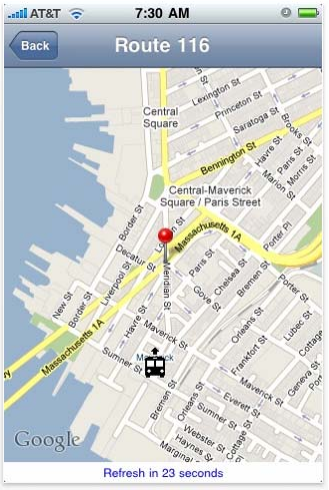

just hop on
bus arrival sms system
Homepage
Contact Us
How to use the SMS system
Step One: Text to (617) 299 6591
Step Two: Find your stop number
Step Third: Find the next arrival time of the next bus
Find Your Stop:

*Try if for yourself by texting 617.299.6591
this message: bus: 39: 51391

WITHIN EIGHT WEEKS

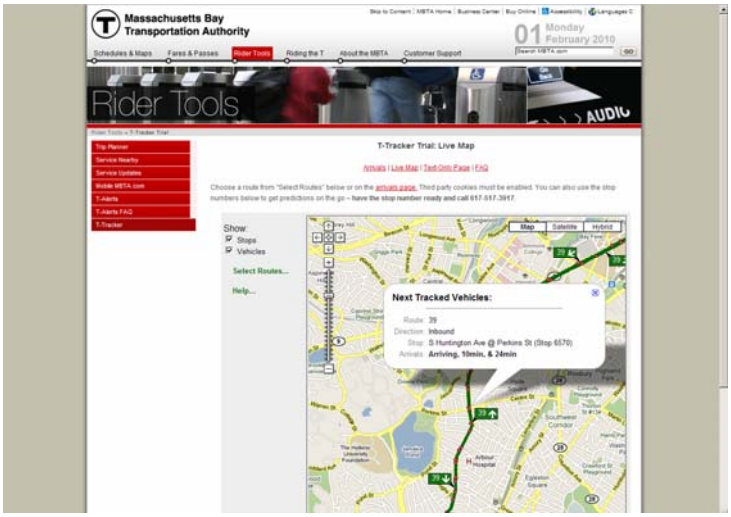
Developers launched more apps included free applications:





JUST LAST WEEK....

THE MBTA LAUNCHED THE T-TRACKER ON MBTA.COM:



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